

CLAIMS

1.- Concrete-based floors and wall coverings with anti-microbial effect, made on a concrete basis, wherein they comprise a base material and an effective amount of at least one microbicide organic agent that provides an efficient and long lasting effect.

2.- Concrete-based floors and wall coverings with anti-microbial effect, made on a concrete basis, according to claim 1, wherein said at least one microbicide agent forms an integral part of the mixture used for floors and wall coverings manufacturing.

3.- Concrete-based floors and wall coverings with anti-microbial effect, made on a concrete basis, according to claim 2, wherein said base material comprises from about 5 to approximately 50% by weight of cement, up to approximately 50% by weight of fine aggregates, from about 20 to approximately 30% by weight of solid aggregates, from about 0.01 to approximately 5% by weight of additives, and where the microbicide agent is present in an amount of about 0.01% to 5% by weight of the base material.

4.- Concrete-based floors and wall coverings with anti-microbial effect, made on a concrete basis, according to claim 2, wherein said microbicide organic agent is selected from a group consisting of derivatives of phenol, organotins, sodium o-phenylphenate tetrahydrate or alkyldimethyl benzylammonium chloride or a mixture thereof.

5.- Concrete-based floors and wall coverings with anti-microbial effect, made on a concrete basis, according to claim 4, wherein said phenol derivatives are preferably derived from 2,4,4'-trichlorine-2'-hydroxyphenol, and said organotin is preferably butyl-tin maleate.

6.- A method to manufacture floors and wall coverings with anti-microbial effect of the type that comprises: a) dose ratio a base material comprised of cement, fines aggregates, solid aggregates, additives and water, on the adequate ratios according to the resistance design required for the application that will be given to the floor or coating; b) mixing base material components to form an homogenous paste; c) pouring homogeneous paste in adequate shape and size moulds according to the floors and wall coverings design; d)

pressing the homogeneous paste contained in the  
moulds to eliminate the water excess and obtain a  
dewatered paste with the adequate density and  
porosity; e) the frame disassembly dewatered  
5 homogenous paste from the mould; f) curing the  
dewatered homogenous paste under at an environment  
temperature during 48 hours or through the use of  
water vapor during 24 hours to obtain a concrete-  
based, cured floor or coating; g) calibrating the  
10 cured floor or coating to boast and shape its  
dimensions; and h) polishing and brightening  
concrete-based floor or coating; wherein it  
comprises a further step of adding an effective  
amount of at least one microbicide agent before the  
15 step b.

7.- The method of manufacturing floors and  
wall coverings with anti-microbial effect according  
to claim 6, wherein said at least microbicide agent  
forms an integral part of the paste used for said  
20 floors and wall coverings manufacturing.

8.- The method of manufacturing floors and  
wall coverings with anti-microbial effect according  
to claim 7, wherein said effective amount of the  
microbicide agent will depend on the use and  
25 environmental conditions of the place on which the

concrete-based floor or coating will be applied; to prevent a bacteria or microorganisms adhesion growth and spreading out upon said floors and wall coverings surfaces.

5                   9.- The method of manufacturing floors and wall coverings with anti-microbial effect according to claim 8, wherein said effective amount of the microbicide agent will range from 0.01% to 5% by weight of the base material.

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